

STEREO MOC Status Report
Time Period: 2014:160 - 2014:166

STEREO Ahead (STA) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 160, as DSS-14 was declared red, switched over to use DSS-26. Initial commanding was delayed an hour due to a processing issue at the DSN. Commands were then uplinked to reconfigure the downlink to 240 kbps, reconfigure the SSR playback, and move back SSR pointers. SSR playback volume was greatly reduced as the track was shortened and the downlink rate reduced from 720 kbps to 240 kbps which resulted in SECCHI and SWAVES data loss on day 163. See DR #G115103 for more information.
- On day 161, during the DSS-24 support, downlink acquisition was delayed 30 minutes due to DSS-24 link-build problems. On uplink acquisition, commands were uplinked to move back SSR pointers. This anomaly resulted in the loss of two frames of SSR data at 2118z. See DR #G115107 for more information.

2. The following spacecraft/instrument events occurred during this week:

- On day 161, C&DH FSW version 3.2.4 was loaded to EEPROM, copy 2, in preparations for solar conjunction testing.
- On day 163, the SSR science partitions filled as follows due to the loss of the 70 meter support on day 160:

SECCHI (Part 19) remained 100% full at 0916z for 3.5 hours
SWAVES (Part 13) remained 100% full at 1020z for 2.4 hours
- On day 164, a HGA operational side lobe test was executed successfully at 0600z through 0730z during the DSS-63 support to validate the performance of data rates for HGA offpointing and on the first and second HGA side lobes in preparations for use during the solar conjunction mission phase. For 30 minutes each, the HGA was offpointed one degree using a 360 kbps downlink and 2000 bps uplink, then

slewed to the first HGA side lobe using a 10 kbps downlink and 500 bps uplink rates, and finally slewing the HGA to the second side lobe using a 3 kbps downlink and 125 bps uplink rates on the AHEAD observatory. Ranging lock was intermittent throughout the test. RF performance is being analyzed.

- The average daily SSR playback volume for Ahead was 4.1 Gbits during this week.

STEREO Behind (STB) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 161, during the DSS-55 support, turbo decoder lock was lost at 1407z. This anomaly resulted in the loss of four frames of SSR data.
- On day 164, during the DSS-55 support, telemetry was lost beginning at 0823z through 0839z due to the telemetry block count not updating in the Receiver, Ranging, and Telemetry Processor. The SSR pointers were repositioned to recover the data. Later in the support, turbo decoder lock was lost intermittently beginning at 1244z through 1304z. The turbo decoder anomaly resulted in the loss of 3988 frames of SSR data. See DR# M108025 for more information.
- On day 166, during the DSS-25 support, command bind was lost at 1551z due to a two second modulation error. The command bind was re-established at 1633z and this anomaly had no impact on operations. See DR# G115135 for more information.

2. The following spacecraft/instrument events occurred during this week:

- The average daily SSR playback volume for Behind was 4.5 Gbits during this week.